Amendments to the Specification:

Please replace the paragraph at page 17, lines 12-20 with the following rewritten

paragraph:

Fig. 12 shows an exemplary windowing and pattern recognition operation on a
second image portion 516 of image 500. As shown in Fig. 12, the second portion 516 is
compared to loose-template 640, and the difference between each image element of the
second image portion 516 [A = (0, 63, 98, 0)] and respective loose-template image element T_4
= (0, 63, 191, 0) is placed in array 652. Next, the absolute value of each image element of
array 652 is taken to produce a second array 654 and, as with Fig. 11, each image element of
array 654 is then analyzed to create a pass/fail array 646 656. As shown in Fig. 12, because
the third portion image element [98] is beyond its respective range [191±32], a negative
feature recognition results.

Please replace the paragraph at page 18, lines 1-8 with the following rewritten

paragraph:

Fig. 14 shows another exemplary windowing and pattern recognition operation on a
third image portion 518. As shown in Fig. 14, each image element of the portion 518 is
mapped to a new, low-resolution array 672. As discussed above, lowering the resolution of
the portion 518 can allow each image element of array 672 to match a low-resolution
template image element without requiring an exact eight-bit match because ranges become
inherently incorporated into the templates by virtue of the lower resolution. The low-
resolution array 672 then can be compared to template 670, to create a pass/fail array 674
which, in turn, can produce a "match/no match" indication 674 676.

Please replace the paragraph at page 18, lines 9-18 with the following rewritten

paragraph:

Fig. 15 shows another exemplary low-resolution approach to windowing and pattern
recognition operation on the third image portion 518 shown in Fig. 14 as well as a fourth
image portion 519. As shown in Fig. 15, each image element of the third image portion 518
is mapped to low-resolution array 672 and each image element of the fourth image portion

519 is similarly mapped to a second low-resolution array 681. However, instead of comparing each low-resolution array 680 and 681 to predetermined templates, the image elements are arranged into respective second arrays 682 and 683, which can be used to create vectors ~~674~~ 684 and ~~675~~ 685. As discussed above, vectors ~~674~~ 684 and ~~675~~ 685 can act as pointers to state spaces or memory locations, or the vectors ~~674~~ 684 and ~~675~~ 685 can alternatively be directly compared to predetermined values.

Please replace the paragraph at page 18, line 26 – page 19, line 2 with the following rewritten paragraph:

Fig. 17 depicts a second exemplary arbitration operation on the image portion 710 in image 500. As shown in Fig. 17, four screens of features 742-748 are extracted and provided to arbitrator 750. The arbitrator 750 can then operate on the separate screens of features 742-748 using four separate sets of rules 752-758 to each produce one or more decision vectors (not shown). Rule set 762 can further operate the decision vectors provided by rule sets 752-758 to produce one or more final decision vectors ~~754~~ 764. Again, while the exemplary arbitrator 750 produces sets of decision vectors ~~754~~ 764, the arbitrator 750 can alternative act as a filter to remove extraneous features or create new features representing amalgams of features of other separate features.